Spin meeting minute, 11/2/2005

Ernest recalculated the lattice matching with Alfredo's field maps of two snakes. The vertical tune along the ramp is 8.90 (injection), 8.96 ($\gamma=4$) and 8.98 ($\gamma=5$), respectively. The compensation quads for warm snake follows $\frac{1}{p^2}$ but not ones for cold snake. β_{max} is about 60 meters, but β_x 3m and β_y 30m at the cold snake. Nick reported a solution he worked on with Alfredo. The vertical tune along the ramp is 8.98 (injection), 8.96 ($\gamma=4$) and 8.98 ($\gamma=5$), respectively. They constraint the beta function along the energy ramp. The lattice match is better at injection. An orbit bump at the cold snake is also generated. Waldo suggested to check the momentum aperture at injection (and along the ramp). The range of $\delta P/P$ can be $\pm 10^{-3}$. In both calculations, dispersion functions do not cross zero. In the future operation, the vertical tune at injection can be lowered to relax the orbit distortion. BtA and AtR matching would be worked on with proper tunes we are going to used. Junpei already generated a new field map for warm snake.

Waldo presented a solution for radial polarization at PHENIX for 100GeV. It would require the inner magnets running at higher field (increase from 2.5T to 3.5T). It is suggested to test it in the early part of the run.

Mei reported the progress on the dynamic spin tracking with spink. The results indicate more debug is needed. It is working in progress.

Haixin presented the first draft of the AGS pp setup run plan. There were many comments in the meeting and the updated run plan is in the webpage:

http://www.agsrhichome.bnl.gov/AP/Spin2006/FY06AGSPolProRunPlan.htm

He welcomes more comments to come.

Due to the beam experiment workshop next week, there will be no spin meeting next week.

Haixin